

PATENT ABSTRACTS OF JAPAN

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(54) NIGHTTIME-VISUAL BACK SURFACE LIGHTING DEVICE FOR LIQUID CRYSTAL DISPLAY

(57)Abstract:

PURPOSE: To compatibly use an LCD display or a back surface lighted and electrooptically adjusted light bulb designed for daytime observation for nighttime-visual observation.

CONSTITUTION: The liquid crystal display(LCD) 12 designed by using a back surface lighting system for providing the display of excellent contrast with high luminance under a daytime state is inappropriate for use in a dark nighttime state where it is requested to utilize an electronic nighttime vision equipment for the observation of the display. Thus, improvement to a standard back surface lighting display capable of putting out a general means used for daytime vision and achieving minimum intensity acceptable for nighttime vision electronic observation by a second low level illumination source through the utilization of the array of second fluorescent light sources 37 or low level intensity light sources such as small-sized incandescent lamps or light emitting diodes is presented.

